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**54 Title: Circuit for bipolar coagulation forceps**

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The invention concerns a circuit for a bipolar coagulation forceps according to the overall concept of Claim 1.

If one applies a suitable voltage to both arms of such a bipolar coagulation forceps, then current flows through the biological tissue clamped between the tips of the forceps to be coagulated. In surgical practice, thin blood vessels and small pieces of tissue may, for example, thus be coagulated using a surgical microscope. High frequency generators are preferably used as voltage sources to create the coagulation current in order to prevent irritation of nerve cells.

It is known to use a foot switch to switch on or switch off the high frequency coagulation current. For this, it is considered disadvantageous that, particularly during coagulation using a surgical microscope in the area of the micro-surgery, the surgeon faces the difficulty that he must search for the foot switch under the operating table with his foot. In order to avoid this disadvantage, it is known (DT-OS 2 019 891) to provide a manual switch between the two electrically insulated arms in order to be able to switch on the high-frequency generator to create the coagulation current via a lower-frequency current circuit. For this, it is considered to be particularly disadvantageous that brief unintentional contact of the tips of the forceps or contact of a conductor with the tip may cause a short-circuit current to flow, possibly damaging the delicate tips. Also, the required actuation of the finger switch during a coagulation procedure may be distracting.

[The drawings show...]

Figure 1        a schematic illustration of a circuit for a coagulation forceps according to the invention; and

Figure 2        a graphic illustration explaining the operating principle of the delay relay.

**Patent Claim 1:**

**Circuit for bipolar coagulation forceps with arms electrically insulated from each other,  
and with an electronic relay to switch on a high-frequency generator to create the  
coagulation current,**

**characterized in that**

**the relay is a delayed-action relay.**

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